

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jacobson et al.



Serial No. 10/563,692

Filed: January 5, 2006

For: Methods for Identifying Cell Surface Receptor Protein Modulators

Art Unit: 1646

Examiner:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.97

Sir:

1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).
2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.
3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.
4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

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By Merck & Co., Inc. Date 1/5/07

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5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

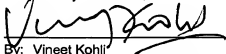
U. S. SERIAL NUMBER	RELATED APPLICATION	
	FILING DATE	MERCK CASE

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6. In accordance with 37 C.F.R. 1.97, (check one)

- ☐ the attached information is filed within three months of the filing date of the captioned case.
- ☒ the attached information is filed more than three months after the filing date but prior to the mailing of a first Office Action on the merits.
- ☐ the attached information is filed before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
- ☐ the attached information is being filed more than three months after the filing date and after the mailing of a first Office Action on the merits, but before the mailing date of a Final Action, Notice of Allowance, or an action that otherwise closes prosecution in the application. The enclosed authorization is therefore given to charge Deposit Account No. 13-2755 for the fee required under 37 C.F.R. 1.17(p).
- ☐ each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- ☐ each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart application *and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the information disclosure statement.*
- ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated under 37 C.F.R. 1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,



By: Vineet Kohli

Attorney For Applicant(s)

Reg. No. 37,003

MERCK & CO., INC.

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Date: January 5, 2007

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Application Number	10/563,692
Filing Date	January 5, 2006
First Named Inventor	Marlene A. Jacobson
Group Art Unit	1646
Examiner Name	
Attorney Docket Number	21254P

[illegible][illegible]Examiner
Signature

Date Considered

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Attorney Docket Number	21254P

Sheet	2	of	5
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	A	Hollman and Heinemann, "Cloned Glutamate Receptors", Annual Rev. Neurosci., 17:31-108 (1994)
	B	Watkins and Evans, "Excitatory Amino Acid Transmitters", Annual Rev. Pharmacol. Toxicol., 21:165-204 (1981)
	C	Watkins, Krogsgaard-Larsen, and Honore, "Structure-activity relationships in the development of excitatory amino acid receptor agonists and competitive antagonists", TiPS, 11:25-33 (1990)
	D	Pin and Duvoisin, "Review: Neurotransmitter receptors I, The Metabotropic Glutamate Receptors: Structure and Functions", Neuropharmacology, 34(1):1-26 (1995)
	E	Schoepp, Bockaert and Sladeczek, "Pharmacological and functional characteristics of metabotropic excitatory amino acid receptors", TiPS, 11:508-515 (1990)
	F	Masu et al., "Sequence and expression of a metabotropic glutamate receptor", Nature, 349:760-765 (1991)
	G	Nakanishi, Shigetada; "Metabotropic Glutamate Receptors: Synaptic, Transmission, Modulation, And Plasticity", Neuron 13:1031-1037 (1994)
	H	Pace, Joseph N. et al., "GnRH Agonists: Gonadorelin, Leuprolide and Nafarelin", Am. Fam. Physician, 44:(5)1777-1782 (1992)
	I	Nace, G. S. and Wood, A. J., "Pharmacokinetics of Long Acting Propranolol Implications for Therapeutic Use", Clinical Pharmacokinetics, 13:51-64 (1987)
	J	Hurst, Allan; "Metaproterenol, A Potent and Safe Bronchodilator", Annals of Allergy, 31:460-466 (1973)
	K	Sontag, Stephen et al., "Cimetidine, Cigarette Smoking, and Recurrence of Duodenal Ulcer", New England Journal of Medicine, 311(11):689-693 (1984)
	L	Christensen, Halvor N., "Role of Amino Acid Transport and Countertransport in Nutrition and Metabolism", Physiological Reviews, 70(1):43-77 (1990)
	M	Nicholls and Attwell, "The release and uptake of excitatory amino acids", TiPS, 11:462-468 (1990)
	N	Schoepp and Conn, "Metabotropic glutamate receptors in brain function and pathology", Trends Pharmacol. Sci., 14:13-20 (1993)
	O	Salt and Binns, "Contributions of mGlu1 and mGlu5 Receptors to Interactions with N-Methyl-D-Aspartate Receptor-Mediated Responses and Nociceptive Sensory Responses of Rat Thalamic Neurons", Neuroscience, 100(2):375-380 (2000)

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Sheet	3	of	5	Application Number	10/563,692
				Filing Date	January 5, 2006
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				Attorney Docket Number	21254P

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
P		Tatarczynska et al., "Potential anxiolytic- and antidepressant-like effects of MPEP, a potent, selective and systemically active mGlu5 receptor antagonist", British Journal of Pharmacology, 132:1423-1430 (2001)
Q		Chiamulera et al., "Reinforcing and locomotor stimulant effects of cocaine are absent in mGluR5 null mutant mice", Nature Neuroscience, 4(9):873-874 (2001)
R		Chavez-Noriega et al., "Metabotropic Glutamate Receptors: Potential Drug Targets for the Treatment of Schizophrenia", Current Drug Targets - CNS & Neurological Disorders, 1:261-281 (2002)
S		Zheng & Gallagher, "Trans-ACPD(trans-D,L-1-amino-1,3-cyclopentanedicarboxylic acid) elicited oscillation of membrane potentials in rat dorsolateral septal nucleus neurons recorded intracellularly in vitro", Neuroscience Letters, 125:147-150 (1991)
T		Birrell et al., "(1S,3R)-1-Aminocyclopentane-1,3-Dicarboxylic Acid Attenuates N-Methyl-D-Aspartate-Induced Neuronal Cell Death in Cortical Cultures Via a Reduction in Delayed Ca2+ Accumulation", Neuropharmacology, 32(12):1351-1358 (1993)
U		Siliprandi et al., "Activation of the glutamate metabotropic receptor protects retina against N-methyl-D-aspartate toxicity", European Journal of Pharmacology, 219:173-174 (1992)
V		Chiamulera et al., "Activation of metabotropic receptors has a neuroprotective effect in a rodent model of focal ischaemia", European Journal of Pharmacology, 216:335-336 (1992)
W		Opitz and Reymann, "Blockade of metabotropic glutamate receptors protects rat CA1 neurons from hypoxic injury", NeuroReport, 2(8):455-457 (1991)
X		Sacaan and Schoepp, "Activation of hippocampal metabotropic excitatory amino acid receptors leads to seizures and neuronal damage", Neuroscience Letters, 139:77-82 (1992)
Y		Lipartiti et al., "In Rats, the Metabotropic Glutamate Receptor-Triggered Hippocampal Neuronal Damage is Strain-Dependent", Life Sciences, 52, PL85-90 (1993)
Z		Koh et al., "Activation of the metabotropic glutamate receptor attenuates N-methyl-D-aspartate neurotoxicity in cortical cultures", Proc. Natl. Acad. Sci. USA, 88:9431-9435 (1991)
AA		Knopfel et al., "Metabotropic Glutamate Receptors: Novel Targets for Drug Development", Journal of Medicinal Chemistry, 38(9):1417-1426 (1995)
BB		Deschamps et al., "Identification of a Transcriptional Enhancer Element Upstream from the Proto-Oncogene fos", Science, 230:1174-1177 (1985)
CC		Fisch et al., "An AP1-Binding Site in the c-fos Gene Can Mediate Induction by Epidermal Growth Factor and 12-O-Tetradecanoyl Phorbol-13-Acetate; Molecular and Cellular Biology, 9(3):1327-1331 (1989)
DD		Friedmann, Theodore; "Progress Toward Human Gene Therapy", Science, 244:1275-1281 (1989)

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Sheet	4	of	5	Attorney Docket Number	21254P

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	EE	Mulligan et al., "Synthesis of rabbit β -globin in cultured monkey kidney cells following infection with a SV40 β -globin recombinant genome", Nature, 277:108-114 (1979)
	FF	Okayama-Berg, "High-Efficiency Cloning of Full-Length cDNA", Molecular and Cellular Biology, 2(2):161-170 (1982)
	GG	Wong et al, Genetics Institute, "Human GM-CSF: Molecular Cloning of the Complementary DNA and Purification of the Natural and Recombinant Proteins", Science, 228:810-815 (1985)
	HH	Gorman et al., "Recombinant Genomes Which Express Chloramphenicol Acetyltransferase in Mammalian Cells", Molecular and Cellular Biology, 2(9):1044-1051 (1982)
	II	Rosenthal, N., "Identification of Regulatory Elements of Cloned Genes with Functional Assays", Methods Enzymology, Guide to Molecular Cloning Techniques, 152:704-720 (1987)
	JJ	Alton and Vapnek, "Nucleotide sequence analysis of the chloramphenicol resistance transposon Tn9", Nature, 282:864-869 (1979)
	KK	deWet et al., "Firefly Luciferase Gene: Structure and Expression in Mammalian Cells", Molecular and Cellular Biology, 7(2):725-737 (1987)
	LL	Baldwin et al., Cloning of the Luciferase Structural Genes from <i>Vibrio harveyi</i> and Expression of Bioluminescence in <i>Escherichia coli</i> , Biochemistry, 23:3663-3667 (1984)
	MM	Toh et al., "Isolation and characterization of a rat liver alkaline phosphatase gene", Eur. J. Biochem., 182:231-237 (1989)
	NN	Cullen and Malim, "Secreted Placental Alkaline Phosphatase as a Eukaryotic Reporter Gene", Methods in Enzymology, Recombinant DNA, 216:362-368 (1992)
	OO	Fink et al., "The CGTCA sequence motif is essential for biological activity of the vasoactive intestinal peptide gene cAMP-regulated enhancer", Proc. Natl. Acad. Sci., 85:6662-6666 (1988)
	PP	Montminy et al., "Identification of a cyclic-AMP-responsive element within the rat somatostatin gene", Proc. Natl. Acad. Sci., 83:6682-6686 (1986)
	QQ	Comb et al., "A cyclic AMP- and phorbol ester-inducible DNA element", Nature, 323:353-356 (1986)
	RR	Short et al., "Characterization of the Phosphoenolpyruvate Carboxykinase (GTP) Promoter-regulatory Region", Journal of Biological Chemistry, 261(21):9721-9726 (1986)
	SS	Lee et al., "Purified Transcription Factor AP-1 Interacts with TPA-Inducible Enhancer Elements", Cell, 49:741-752 (1987)

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Sheet 5 of 5

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